

The PREFACE.

by the same way, not only by beholding and contemplating, but by tasting too those fruits of Natural knowledge, that were never yet forbidden.

From hence the World may be assisted with variety of Inventions, new matter for Sciences may be collected, the old improv'd, and their rust rubb'd away; and as it is by the benefit of Senses that we receive all our Skill in the works of Nature, so they also may be wonderfully benefited by it, and may be guided to an easier and more exact performance of their Offices; 'tis not unlikely, but that we may find out wherein our Senses are deficient, and as easily find wayes of repairing them.

The Indeavours of Skilful men have been most conversant about the assistance of the Eye, and many noble Productions have followed upon it; and from hence we may conclude, that there is a way open'd for advancing the operations, not only of all the other Senses, but even of the Eye it self; that which has been already done ought not to content us, but rather to encourage us to proceed further, and to attempt greater things in the same and different wayes.

'Tis not unlikely, but that there may be yet invented several other helps for the eye, as much exceeding those already found, as those do the bare eye, such as by which we may perhaps be able to discover living Creatures in the Moon, or other Planets, the figures of the compounding Particles of matter, and the particular Schematisms and Textures of Bodies.

And as Glasses have highly promoted our seeing, so 'tis not improbable, but that there may be found many Mechanical Inventions to improve our other Senses, of hearing, smelling, tasting, touching. 'Tis not impossible to hear a whisper a furlongs distance, it having been already done; and perhaps the nature of the thing would not make it more impossible, though that furlong should be ten times multiply'd. And though some famous Authors have affirm'd it impossible to hear through the thinnest plate of Muscovy-glass; yet I know a way, by which 'tis easie enough to hear one speak through a wall a yard thick. It has not been yet thoroughly examin'd, how far Otocousticons may be improv'd, nor what other wayes there may be of quickning our hearing, or conveying sound through other bodies than the Air: for that that is not the only medium, I can assure the Reader, that I have, by the help of a distended wire, propagated

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gated the sound to a very considerable distance in a seemingly quick a motion as that of light, at least then that, which at the same time was propagated this not only in a straight line, or direct, but angles.

Nor are the other three so perfect, but that diligent many mechanical contrivances, may also highly since the sense of smelling seems to be made by the Air (impregnated with the steams and effluvia of Bodies) through the grisly meanders of the Nerve cover'd with a very sensible nerve, and motion from the processus mamillares of the Brain, joining glandules, and by the moist steam of the Iguana convenient for the reception of those effluvia and mixing of those steams with that liquor, and thereby perhaps by insinuating themselves into the juices in the same manner, as I have in the following Observation of Salt to pass through the skins of Eggs, and Frogs. seems to be made by some such way, 'tis not improbable, but that there may be found many Mechanical contrivances, for making a great quantity of Air pass through a small hole, might as much promote the sense of smelling, as the direct passage does dull and destroy it. Several tryals have been made hindring and promoting this sense, and have succeeded to expectation; and indeed to me it seems capable of being judg'd of the constitutions of many Bodies. Perhaps we may also judge (as other Creatures seem to do) what is the nature of the Air, and in a word, what are the specifick properties of the Air.

There may be also some other mechanical wayes of perceiving the effluvia of Bodies; several Instances may be proper, I could give of Mineral steams and exhalations, impossible, but that by some such wayes improved, many Minerals lye buried under the Earth, without the help of some things to confirm this Conjecture may be found in the Writers of Minerals, speaking of the Vegetables that grow in pine, in those steams.